

REMARKS

Applicants and Applicants' attorney express appreciation to the Examiner for the courtesies extended during the recent Interview held on August 2, 2004. The claim amendments and arguments submitted in this paper are consistent with the amendments and arguments presented during the course of the Interview.

Claims 1, 3-17, 25, and 27-33 are pending, of which claim 1 is an independent method claim with corresponding independent computer program product claim 25, claim 11 is an independent method claim with corresponding computer program product claim 31, and claim 14 also is an independent method claim. As indicated above, by this paper claims 1, 3, 11, 14, 25, and 31 have been amended,¹ claims 18 and 20-24 have been canceled without prejudice (claims 2, 19, and 26 were canceled without prejudice previously) and new claim 34 has been added to reinstate the subject matter recited in previously canceled claim 26.

The Office Action rejected the independent claims 1, 11, 14, 18, 25, and 31 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No 5,918,013 to Mighdoll et al. ("*Mighdoll*") in view of RFC 2616 by Fielding et al. ("*Fielding*"). The remaining dependent claims were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Mighdoll* in view of *Fielding* or as being unpatentable over *Mighdoll* and *Fielding* further in view of U.S. Patent No. 6,311,216 to Smith et al. ("*Smith*").²

Applicants noted for the record in Amendment "A" replying to the prior Office Action mailed December 16, 2003, that Application No. 09/679,716 (this application), and U.S. Patent No. 6,311,216 to Smith et al. were, at the time the invention of Application No. 09/679,716 owned by or subject to an obligation of assignment to Microsoft Corporation. Therefore, in accordance with 35 U.S.C § 103(c), *Smith* is disqualified as 35 U.S.C. § 102(e) prior art. (Applicants' filed on October 4, 2000, which is on or after November 29, 1999, and *Smith* issued October 30, 2001.) See MPEP § 702.02(l).

¹Support for the claim amendments can be found throughout the Specification, including at page 3, lines 1-4 & 14-22; page 5, line 19 – page 6, line 6; page 6, lines 7-10; page 9, line 20 – page 10, line 10; and page 16, lines 12-22.

²Although the prior art status of all cited art is not being challenged at this time, Applicants reserve the right to do so in the future. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status or asserted teachings of the cited art.

The current Office Action mailed June 3, 2004, however, continues to reject claims 7, 22, and 29 under 35 U.S.C. § 103(a) as being unpatentable over *Mighdoll*, *Fielding*, and *Smith*. Accordingly, Applicants once again respectfully submit that because *Smith* has been disqualified as prior art, the rejections of record under 35 U.S.C. § 103(a) for claims 7, 22, and 29 should be withdrawn regardless of any position taken by the Examiner with respect to the following remarks.

Applicants' invention, as claimed for example in independent method claim 1, relates to transparently redirecting a request for content such that a client system is unaware of the redirection. In accordance with claim 1, a front-end server receives a request for the content from the client system, and makes it appear as if the front-end server is the source of the content, which actually is stored at a back-end server. The front-end server directs the request to a particular back-end server, receives from the particular back-end server, a redirect response identifying one or more other back-end servers where the content is stored, automatically and without client system intervention redirects the request to a redirect back-end server, receives the requested content from the redirect back-end server, and sends the requested content to the client system so that any local caching of the content received from the front-end server remains valid at the client system regardless of which of the one or more back-end servers actually stores the content. Independent claim 25 recites similar limitations from the perspective of a computer program product.

Likewise, Applicants' invention, as claimed for example in independent method claim 14, also relates to transparently redirecting a request for content such that a client system is unaware of the redirection. In accordance with claim 14, a front-end server receives a request for the content from the client system as if the front-end server were the source of content stored at the one or more back-end servers and queries a particular back-end server for the requested content, with the response to the query identifying one or more other back-end servers where the content is stored—the one or more other back-end servers are either inaccessible or unknown to the client system. The front-end server automatically and without user intervention retrieves the requested content from a redirect back-end server which is one of the one or more other back-end servers identified in the query response and sends the requested content to the client system so that any local caching of the requested content received from the front-end server remains valid

at the client system even if the requested content later moves from the redirect back-end server or is retrieved from a back-end server other than the redirect back-end server.

Applicants' invention, as claimed for example in independent method claim 11, relates to redirecting a request for content directed to a particular back-end server when the content is not stored at the particular back-end server. In accordance with claim 11, a back-end server receives a content request from the client system through the front-end server, the content request including a front-end indicator in order to indicate that the front-end server is making the content request on behalf of the client system and examines the content request for the front-end indicator. If the front-end indicator is present in the content request, the back-end server creates a redirect response to the content request that includes a list identifying a plurality of redirect back-end servers where the content is stored so that the front-end server can load balance among the plurality of redirect back-end servers capable of satisfying the content request, and otherwise creates a redirect response to the content request that includes a single redirect back-end server where the content is stored. The back-end server sends the redirect response to the front-end server so that the front-end server can redirect the request to one or more redirect back-end servers. Independent claim 31 recites similar limitations recited from the perspective of a computer program product.

"To establish a *prima facie* case of obviousness . . . the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP § 706.02(j).

Mighdoll discloses a proxy server that accesses a remote server on behalf of a client to retrieve a document in response to a request from the client. Col. 2, ll. 27-30. The document includes data to be used by the client in generating a display, and the proxy alters the data in the document for a variety of reasons, such as to correct bugs in the document, improve transmission efficiency, etc. Col. 2, ll. 30-33; col. 7, ll. 7-20. The proxy server includes a cache used for temporary storage of Web documents and images. Col. 64 – col. 5, l. 9.

Fielding discloses the Internet Standard for HTTP/1.1. In Section 10.3, *Fielding* describes a variety of redirection status codes, including a status code for multiple redirection choices. *Fielding* also discloses a User-Agent request-header that contains information about the user agent originating a request. Section 14.43. *Fielding* describes a user agent as: "The client which initiates a request. These are often browsers, editors, spiders (web-traversing robots), or other end user tools." Section 1.2. Similarly, a "Proxy-Authorization request-header field

allows the client to identify itself (or its user) to a proxy which requires authentication." Section 13.34.

Among other things, however, *Mighdoll* and *Fielding* fail to teach or suggest a front-end server making it appear as if the front-end server is the source of content which actually is stored at a back-end server, and sending requested content to the client system from the front-end server so that any local caching of the content received from the front-end server remains valid at the client system regardless of which of the one or more back-end servers actually stores the content, as recited for example in independent method claim 1 and corresponding computer program product claim 25, and *Mighdoll* and *Fielding* fail to teach or suggest a front-end server receiving a request for the content from the client system as if the front-end server were the source of content stored at the one or more back-end servers, querying a particular back-end server for the requested content, wherein the response to the query identifies one or more other back-end servers where the content is stored, the one or more other back-end servers being either inaccessible or unknown to the client system, and sending the requested content to the client system from the front-end server so that any local caching of the requested content received from the front-end server remains valid at the client system even if the requested content later moves from the redirect back-end server or is retrieved from a back-end server other than the redirect back-end server, as recited for example in independent method claim 14.

Similarly, among other things *Mighdoll* and *Fielding* also fail to teach or suggest a back-end server examining a content request for a front-end indicator, and if the front-end indicator is present in the content request, creating a redirect response to the content request that includes a list identifying a plurality of redirect back-end servers where the content is stored so that the front-end server can load balance among the plurality of redirect back-end servers capable of satisfying the content request, and otherwise creating a redirect response to the content request that includes a single redirect back-end server where the content is stored, as recited for example in independent method claim 11 and corresponding computer program product claim 31.

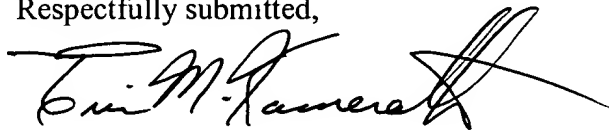
During the Interview, the Examiner seemed to concurred with this analysis by noting in the Interview Summary that the proposed amendments to the independent claims appear to distinguish the cited art, and that the Examiner will review the amended claims and cited references in detail upon receiving Applicants' formal response and update the search.

Based on at least the foregoing reasons, therefore, Applicants respectfully submit that the cited prior art fails to anticipate or make obvious Applicants invention, as claimed for example, in independent claims 1, 11, 14, 25 and 31. Applicants note for the record that the remarks above render the remaining rejections of record for the independent and dependent claims moot, and thus addressing individual rejections or assertion with respect to the teachings of the cited art is unnecessary at the present time, but may be undertaken in the future if necessary or desirable, and Applicants reserve the right to do so.

In the event that the Examiner finds any remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 27th day of August, 2004.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Eric M. Kamerath", with a stylized flourish extending from the end.

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